[4910-13-P]

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2020-7071; Project Identifier 2019-CE-048-AD]**

**RIN 2120-AA64**

# Airworthiness Directives; Viking Air Limited (Type Certificate Previously Held by Bombardier Inc. and de Havilland, Inc.) Airplanes

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** The FAA proposes to supersede Airworthiness Directive (AD) 64-09-03, which applies to all de Havilland (type certificate now held by Viking Air Limited) Model DHC-2 “Beaver” airplanes. AD 64-09-03 requires inspecting the aileron mass balance weight arms for cracks and corrosion and replacing any damaged part. Since the FAA issued AD 64-09-03, Transport Canada superseded its mandatory continuing airworthiness information (MCAI) to correct an unsafe condition on these products. This proposed AD would require establishing a corrosion prevention and control program to identify and correct corrosion. This proposed AD would also require completing all of the initial tasks identified in the program and reporting corrosion findings to Viking. The proposed corrosion prevention and control program would include the inspection of the aileron balance weight arms required by AD 64-09-03. The FAA is proposing this AD to address the unsafe condition on these products.

**DATES:** The FAA must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

• Federal eRulemaking Portal: Go to https://www.regulations.gov. Follow the instructions for submitting comments.

• Fax: (202) 493-2251.

• Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.

• Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this NPRM, contact Viking Air Limited Technical Support, 1959 De Havilland Way, Sidney, British Columbia, Canada, V8L 5V5; phone: (North America) (800) 663-8444; fax: (250) 656-0673; email: technical.support@vikingair.com; website: https://www.vikingair.com/support/service-bulletins. You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 901 Locust, Kansas City, MO 64106. For information on the availability of this material at the FAA, call (817) 222-5110.

**Examining the AD Docket**

You may examine the AD docket at https://www.regulations.gov by searching for and locating Docket No. FAA-2020-7071; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this NPRM, the MCAI, any comments received, and other information. The street address for Docket Operations is listed above.

**FOR FURTHER INFORMATION CONTACT:** Aziz Ahmed, Aviation Safety Engineer, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, New York 11590; phone: (516) 287-7329; email: aziz.ahmed@faa.gov.

**SUPPLEMENTARY INFORMATION:**

**Comments Invited**

The FAA invites you to send any written relevant data, views, or arguments about this proposal. Send your comments to an address listed under ADDRESSES. Include "Docket No. FAA-2020-7071; Project Identifier 2019-CE-048-AD" at the beginning of your comments. The most helpful comments reference a specific portion of the proposal, explain the reason for any recommended change, and include supporting data. The FAA will consider all comments received by the closing date and may amend the proposal because of those comments.

Except for Confidential Business Information (CBI) as described in the following paragraph, and other information as described in 14 CFR 11.35, the FAA will post all comments received, without change, to https://www.regulations.gov, including any personal information you provide. The agency will also post a report summarizing each substantive verbal contact received about this NPRM.

**Confidential Business Information**

CBI is commercial or financial information that is both customarily and actually treated as private by its owner. Under the Freedom of Information Act (FOIA) (5 U.S.C. 552), CBI is exempt from public disclosure. If your comments responsive to this NPRM contain commercial or financial information that is customarily treated as private, that you actually treat as private, and that is relevant or responsive to this NPRM, it is important that you clearly designate the submitted comments as CBI. Please mark each page of your submission containing CBI as "PROPIN." The FAA will treat such marked submissions as confidential under the FOIA, and they will not be placed in the public docket of this NPRM. Submissions containing CBI should be sent to Aziz Ahmed, Aerospace Engineer, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, New York 11590. Any commentary that the FAA receives which is not specifically designated as CBI will be placed in the public docket for this rulemaking.

**Background**

The FAA issued AD 64-09-03, Amendment 718 (29 FR 5390; April 22, 1964) (AD 64-09-03) for all de Havilland (type certificate now held by Viking Air Limited) Model DHC-2 "Beaver" airplanes. AD 64-09-03 requires repetitively inspecting the aileron mass balance weight arms for cracks and corrosion and replacing any damaged part. AD 64-09-03 resulted from cracks and corrosion found on aileron mass balance weight arm part numbers (P/Ns) C2WA151, C2WA152, C2WA127, and C2WA128.

**Actions Since AD 64-09-03 Was Issued**

Since the FAA issued AD 64-09-03, the type certificate holder for Model DHC-2 airplanes changed from de Havilland to Viking Air Limited. Transport Canada, which is the aviation authority for Canada, superseded its prior ADs on this unsafe condition and issued AD CF-2019-25, dated July 5, 2019 (referred to after this as "the MCAI"), to

correct an unsafe condition for all serial-numbered Viking Air Limited Model DHC-2 Mk. I, DHC-2 Mk. II, and DHC-2 Mk. III airplanes. The MCAI states:

> Service experience indicates that aging aircraft are more likely to be affected by corrosion. Viking Air Limited (Viking), as Type Certificate holder for DHC-2, has developed a supplementary inspection and corrosion control program which identifies specific area that must be inspected to ensure the corrosion-related degradation does not result in an unsafe condition. The program is documented in Viking Product Support Manual (PSM) 1-2-5 DHC-2 Beaver Supplementary Inspection and Corrosion Control Manual (SICCM).
>
> Corrosion levels are defined in PSM 1-2-5 as a means for assessing the effectiveness of the corrosion control program and recording the results of the inspections mandated by this [Transport Canada] AD.
>
> The initial issue of PSM 1-2-5, Revision IR, was mandated by [Transport Canada] AD CF-2017-33. This initial issue of PSM 1-2-5 focused on the fight control systems. Viking has revised PS 1-2-5 to Revision 1. This revision includes additional inspection tasks for components of airframe systems other than flight controls. This [Transport Canada] AD is issued to require accomplishment of those additional inspection tasks and supersedes [Transport Canada] AD CF-2017-33.
>
> This [Transport Canada] AD continues to require accomplishment of the tasks that were included in the initial issue of PSM 1-2-5. Note: The tasks being carried over from Revision IR to Revision 1 are required to be performed in accordance with the current revision of the PSM 1-2-5, reference [Canadian Aviation Regulation] CAR 571.02 paragraph (1) (a).
>
> Transport Canada (TC) has concluded that Tasks C57-51-01 and C57-51-02 make the repetitive inspections required by [Transport Canada] AD CF-61-12 [which corresponds to FAA AD 64-09-03] unnecessary. CF-61-12 is therefore cancelled.
>
> Viking determined that changes to the compliance times for two of the tasks in PSM 1-2-5 were required. For task C57-51-01 the repeat interval was every 1 year in Revision IR and is changed to every 2 years in Revision 1. For task C57-51-02 the repeat interval was every 4 years in Revision IR and is changed to every 4 years or 500 hours air time, whichever occurs first, in Revision 1.
>
> Corrosion-related degradation, if not addressed, could lead to structural failure with consequent loss of control of the airplane. You may examine the MCAI at https://www.regulations.gov by searching for and locating Docket No. FAA-2020-7071.

**Related Service Information**

The FAA reviewed Viking DHC-2 Beaver Service Bulletin V2/0011, Revision NC, dated November 28, 2019. This service information provides a list of new inspection tasks that have been added to the DHC-2 supplementary inspection and corrosion control

program, Viking Product Support Manual (PSM) 1-2-5 DHC-2 Beaver Supplemental Inspection and Corrosion Control Manual, Revision 1, dated January 10, 2019 (Viking PSM-1-2-5, Revision 1).

The FAA also reviewed Viking PSM-1-2-5, Revision 1, which specifies procedures for inspecting areas of the airplane that are particularly susceptible to corrosion-related degradation. Viking PSM 1-2-5, Revision 1 also specifies repetitive inspection intervals, defines the different levels of corrosion, and provides corrective action if corrosion is found.

**FAA's Determination**

This product has been approved by the aviation authority of another country, and is approved for operation in the United States. Pursuant to the FAA's bilateral agreement with this State of Design Authority, it has notified the FAA of the unsafe condition described in the MCAI and service information referenced above. The FAA is issuing this NPRM after determining that the unsafe condition described previously is likely to exist or develop on other products of the same type design.

**Proposed AD Requirements**

This proposed AD would retain none of the requirements of AD 64-09-03. This proposed AD would require establishing a corrosion prevention and control program approved by the FAA, including initial inspection tasks to identify corrosion and cracking, repetitive inspection intervals, and corrective actions (such as repairs and application of corrosion inhibitors) if corrosion or cracking is found. This proposed AD would also require, before further flight after establishing the program, completing all of the initial tasks identified in the program. Lastly, this proposed AD would require reporting corrosion findings to Viking. Because the program would include the inspection of the aileron balance weight arms required by AD 64-09-03, this proposed AD would supersede AD 64-09-03.

**ADs Mandating Airworthiness Limitations**

The FAA has previously mandated airworthiness limitations by issuing ADs that require revising the airworthiness limitation section (ALS) of the existing maintenance manual or instructions for continued airworthiness to incorporate new or revised

inspections. This proposed AD, however, would require establishing and incorporating new inspections into the maintenance records required by 14 CFR 91.417(a)(2) or 135.439(a)(2) for your airplane. The FAA does not intend this as a substantive change. Requiring incorporation of the new ALS requirements into the maintenance records, rather than requiring individual repetitive inspections and replacements, allows operators to record AD compliance once after updating the maintenance records, rather than recording compliance after every inspection and part replacement.

**Differences Between this Proposed AD and the MCAI**

The MCAI requires completing the actions as specified in Viking PSM-1-2-5. Revision 1. This proposed AD would not require Viking PSM-1-2-5, Revision 1, but would require establishing a corrosion prevention and control program using an FAA-approved method. However, the FAA considers Viking PSM 1-2-5, Revision 1 an approved method.

**Costs of Compliance**

The FAA estimates that this AD, if adopted as proposed, would affect 135 airplanes of U.S. registry. The FAA also estimates that it would take about 342 work-hours per airplane to establish a corrosion prevention and control program and comply with the initial inspection tasks of the program.

Based on these figures, the FAA estimates the cost of this proposed AD on U.S. operators to be $3,924,450 or $29,070 per airplane.

The FAA estimates it would take about 1-work hour to report any corrosion found during the proposed initial inspections, for an estimated cost of $85 per airplane.

The extent of damage found during the proposed initial inspections may vary significantly from airplane to airplane. The FAA has no way to determine the estimated cost of repair or replacement of damaged parts for each airplane or how many airplanes may need these repairs or replacements.

**Paperwork Reduction Act**

A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that

collection of information displays a currently valid OMB Control Number. The OMB Control Number for this information collection is 2120-0056. Public reporting for this collection of information is estimated to take approximately 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. All responses to this collection of information are mandatory. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to: Information Collection Clearance Officer, Federal Aviation Administration, 10101 Hillwood Parkway, Fort Worth, TX 76177-1524.

**Authority for this Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, Section 106, describes the authority of the FAA Administrator. Subtitle VII, Aviation Programs, describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701, General requirements. Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

**Regulatory Findings**

The FAA determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that the proposed regulation:

(1) Is not a "significant regulatory action" under Executive Order 12866,

(2) Would not affect intrastate aviation in Alaska, and

(3) Would not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

**List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

**The Proposed Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

**PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

**§ 39.13 [Amended]**

2. The FAA amends § 39.13 by:

a. Removing Airworthiness Directive 64-09-03, Amendment 718 (29 FR 5390; April 22, 1964); and

b. Adding the following new airworthiness directive:

**Viking Air Limited (Type Certificate Previously Held by Bombardier Inc. and de Havilland, Inc.)**: Docket No. FAA-2020-7071; Project Identifier 2019-CE-048-AD.

**(a) Comments Due Date**

The FAA must receive comments on this airworthiness directive (AD) by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**(b) Affected ADs**

This AD replaces AD 64-09-03, Amendment 718 (29 FR 5390; April 22, 1964).

**(c) Applicability**

This AD applies to Viking Air Limited (type certificate previously held by Bombardier Inc. and de Havilland, Inc.) Model DHC-2 Mk. I, DHC-2 Mk. II, and DHC-2 Mk. III airplanes, all serial numbers, certificated in any category.

**(d) Subject**

Joint Aircraft System Component (JASC) Code 2000, Airframe

**(e) Unsafe Condition**

This AD was prompted by mandatory continuing airworthiness information (MCAI) originated by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as corrosion-related degradation in aging aircraft. The FAA is issuing this AD to detect and address corrosion, which could lead to structural failure with consequent loss of control of the airplane.

**(f) Compliance**

Comply with this AD within the compliance times specified, unless already done.

**(g) Inspection Tasks**

Within 8 months after the effective date of this AD, establish in the maintenance records required by 14 CFR 91.417(a)(2) or 135.439(a)(2), as applicable for your aircraft, a corrosion prevention and control program approved by the FAA that includes initial inspections to identify corrosion and cracking, repetitive inspection intervals, and corrective actions (repairs and application of corrosion inhibitors) if corrosion or cracking is found. Before further flight after establishing the corrosion prevention and control program, complete all of the initial tasks identified in the program. To obtain FAA approval, you must contact the New York ACO Branch using the contact information found in paragraph (j)(3) of this AD.

Note 1 to paragraph (g): Viking Product Support Manual PSM 1-2-5 DHC-2 Beaver Supplemental Inspection and Corrosion Control Manual, Revision 1, dated January 10, 2019 (Viking PSM 1-2-5, Revision 1), contains additional information related to this AD and is an FAA-approved method for establishing a corrosion prevention and control program.

Note 2 to paragraph (g) Viking DHC-2 Beaver Service Bulletin V2/0011, Revision NC, dated November 28, 2019 (Viking SB V2/0011, Revision NC), also contains additional information related to this AD.

**(h) Reporting**

If, during any task required by paragraph (g) of this AD, any corrosion is found: within 30 days after completing the task or within 30 days after the effective date of this

AD, whichever occurs later, report the corrosion to Viking at technical.support@vikingair.com or at the address listed in paragraph (j)(4) of this AD. The report must include the following:

(1) Operator;

(2) Airplane serial number;

(3) Airplane hours time-in-service at time of inspection;

(4) Inspection task number and date of inspection;

(5) Airplane operating environment; and

(6) Type, level or extent, location, and cause (if known) of damage.

**(i) Alternative Methods of Compliance (AMOCs)**

(1) The Manager, New York ACO Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the certification office, send it to the attention of the person identified in paragraph (j)(3) of this AD.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(3) An AMOC that provides an acceptable level of safety may be used for any repair, modification, or alteration required by this AD if it is approved specifically for this AD by the Manager, New York ACO Branch, FAA.

**(j) Related Information**

(1) Refer to the MCAI from Transport Canada, AD CF-2019-25, dated July 5, 2019, for related information. You may examine the MCAI at https://www.regulations.gov by searching for and locating Docket No. FAA-2020-7071.

(2) Viking SB V2/0011, Revision NC and Viking PSM 1-2-5, Revision 1 contain additional information related to this AD.

(3) For information about this AD, contact Aziz Ahmed, Aerospace Engineer, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, New York 11590; phone: (516) 287-7329; email: aziz.ahmed@faa.gov.

(4) For service information identified in this AD, contact Viking Air Limited Technical Support, 1959 De Havilland Way, Sidney, British Columbia, Canada, V8L 5V5; phone: (North America) (800) 663-8444; fax: (250) 656-0673; email: technical.support@vikingair.com; website: https://www.vikingair.com/support/service-bulletins. You may review this referenced service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 901 Locust, Kansas City, MO 64106. For information on the availability of this material at the FAA, call (817) 222-5110.

Issued on February 2, 2022.

Gaetano A. Sciortino, Deputy Director for Strategic Initiatives,
Compliance & Airworthiness Division,
Aircraft Certification Service.

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